

## Sencity Road Antenna 1399.99.0039

### Description

Rugged vehicle rooftop multi-band antenna for heavy duty vehicles like bus and truck.  
 Supports cellular, WiFi 2.4, 5 GHz and IEEE 802.11p, GPS/Glonass.  
 Offers a stick antenna socket and separate connector for each application.  
 Single hole mounting, easy cabling feed-through.  
 Works also on non-metallic surfaces.



### Product Configuration

### Technical Data

#### Electrical Data

	Band 1	Band 2	Band 3	Band 4
Frequency (MHz)	698 - 790	790 - 960	1710 - 2690	1710 - 2690
VSWR	2.1	1.8	2	1.8
Impedance (Ohm)	50	50	50	50
Gain (dBi)	5	5	4	6
Composite power max (W)	80	40	40	40
Ambient temperature (°C)	25	25	25	25
Port Isolation (dB)			20	20

	Band 5	Band 6	Band 7
Band Name		GPS/Glonass	Socket
Frequency (MHz)	4900 - 5935	1574 - 1610	
VSWR	1.8	2	
Impedance (Ohm)	50	50	
Gain (dBi)	7		
Composite power max (W)	30		
Ambient temperature (°C)	25		
Port Isolation (dB)	30		

#### Ports

	Port 1	Port 2	Port 3	Port 4
Port name	(white sleeve)	(blue sleeve)	(black sleeve)	(red sleeve)
Connector	SMA, plug (male)	SMA, jack (female)	TNC, plug (male)	TNC, jack (female)
Cable Type	ENVIROFLEX_316_D-AM	ENVIROFLEX_316_D-AM	ENVIROFLEX_316_D-AM	ENVIROFLEX_316_D-AM
Cable Length (m)	0.23	0.2	0.26	0.3
Polarization	vertical	vertical	circular right	
DC grounded	Yes	No	No	No

#### Connections

	Band 1	Band 2	Band 3	Band 4	Band 5	Band 6	Band 7
Port 1	X	X	X				
Port 2				X	X		
Port 3						X	
Port 4							X

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### General Data

Indicated VSWR values are valid for a metallic ground plane of 0.5 x 0.5m or larger. In the 790-5935 MHz band, indicated VSWR values are also valid for installations on non-metallic surfaces.

A W-CDMA 2100 and LTE 2600 2x2 MIMO configuration is supported by using port 1 and 2. In this setup, no stub antenna shall be equipped in order to ensure best MIMO performance.

Available stick antennas see section 'Related products'.

### Electrical Data LNA

LNA noise figure dB	2
LNA current consumption (mA)	30
LNA is connected to	Port 3

LNA input voltage range 3..5V

Total gain @90° elevation 30 dBiC

Values for LNA power consumption, noise figure and gain are given for a 5V operating voltage and may differ slightly for a lower voltage.

### Mechanical Data

Dimensions (mm)	82 x 83 x 208 (Height x Width x Depth)
Weight (kg)	0.41

Stick antenna max. length = 0.5m

Mounting breakthrough Ø30mm

### Environmental Data

Environmental conditions	indoor/outdoor
Operation temperature (°C)	-40 to 85
Storage temperature (°C)	-40 to 85
Transport temperature (°C)	-40 to 85
IP rating	IP68, IP69
Flammability rating	ECE-R118
Solar radiation	DIN 75220
2011/65/EU (RoHS - including 2015/863 and 2017/2102)	compliant
WEEE 2012/19/EU	no special marking needed
ELV 2000/53/EC	compliant
REACH 1907/2006/EC	compliant

ISO 16750:2010 environmental tests

MIL-F-14072D low corrosion design

E-Mark

CE-Mark

### Material Data

Radome colour	RAL 7043 (dark grey)
Radome material	ASA (acrylic ester-styrene-acrylonitrile)
Back plate/base plate material	Aluminium

### Related Products

9091.99.0246 FM Radio Stick antenna 88-108 MHz

9091.99.0247 TETRA Stick antenna 380-430 MHz

9091.99.0248 TETRA Stick antenna 450-470 MHz

9091.99.0250 Metal ground plane foil 0.6x0.6m

9091.99.0254 TETRA Stick antenna 410-430 MHz

### Related Documents

Mounting instruction	DOC-0000361395
Painting instruction	DOC-0000256180
Security instruction	DOC-0000278984
Outline drawing	DOU-00175956
3D-model	DOC-0000367494

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### Additional Information

This product can be customized within the order process. Available options are: - Different radiator combinations - Different cable pigtail length and RF connector types - Fulfillment of fire safety standards EN 45545, DIN 5510 or ECE-R118 - ...and more. Note: The antenna gain as indicated above will vary for a different cable length. For a gain calculation please consider the cable attenuation per meter for the respective frequency band.